

City of Lincoln
Southwest Wastewater Facility Siting Study
Fact Sheet on Site Selection Criteria
February 2006

Project Overview

The purpose of this project is to conduct a siting study evaluation to determine viable locations for a future southwest wastewater facility to serve long-term growth needs for the City of Lincoln. The wastewater facility options will be planned and sized to accommodate tributary service areas for Tier II and Tier III development scenarios. Viable peak flow handling facility and treatment facility locations will be identified, screened, and evaluated in order to determine the best location(s) for a future peak flow handling facility and/or wastewater treatment facility. The future wastewater facility will not be needed by the City until after the year 2025.

Development is occurring in southwest Lincoln and this portion of the City will continue to develop during the next 20 years. As development progresses, available land space will decrease and thereby limit City options for future wastewater facility locations. It will be important to select a site location in 2006 so that land can be reserved or purchased in the near future to accommodate long-term City wastewater needs. In consideration of future City growth, the best long-term strategy is to optimize the existing sewer collection system and construct a wastewater facility in southwest Lincoln, rather than conveying future additional wastewater flow in southwest Lincoln to the Theresa Street Facility for treatment. In addition, the Salt Valley Sewer pipeline corridor has minimal space for construction of a third parallel sewer pipeline. Therefore, it is necessary to identify and reserve a site in southwest Lincoln to meet the City's future long-term wastewater treatment and peak flow handling needs.

Project Investigation & Evaluation

Background information and data has been gathered and reviewed for the investigated sites. Aerial and topographic maps, City flood plain maps, watershed planning maps, property ownership and zoning maps, utility maps (water, water wells, sewer, power, gas, fiber optic communications), future transportation plans and maps, and additional data provided by the City relating to potential sites has been gathered and reviewed. City agencies, including City-County Planning, Watershed Management, Parks & Recreation, Public Works, Lincoln Water, and Lincoln Wastewater, have provided information on long-range plans and projects within the study area. County and State agencies have also provided long-range planning information. Key protected lands in the study area such as Wilderness Park have been identified and evaluated.

Site Selection Criteria

Based on the information and data collected, site selection criteria were developed in coordination with LWWS staff and City agencies. The selection criteria categories listed below will be evaluated with consideration of 35 criteria as shown in the attached figure. Siting criteria definitions and the basis of evaluation for criteria are shown in the attached memorandum.

SITE SELECTION CRITERIA CATEGORIES

- Land Availability
- Site Accessibility
- Site Condition
- Engineering Functionality
- Environmental Conditions
- Public Acceptance

Screening Evaluation Process

The site selection criteria will be presented to all stakeholders and refined after input has been received. A site selection steering committee comprised of City agencies will review and screen the investigated sites and select approximately five regional areas for further evaluation. A decision management computer program will then be used to organize, evaluate, and communicate the decision-making process for the final evaluation.

Each regional area will be evaluated using the six screening criteria categories and associated weighting factors. Weighting factors will be determined through stakeholder input and a rating score for each proposed area will be calculated. Siting information and rankings will be presented in graphical and table format for effective communication with all stakeholders.

A sensitivity analysis will be conducted to determine how the screening criteria influence the overall rankings and a workshop will be conducted with LWWS and the steering committee to review the analysis. Real time revisions to the decision management model will be made during the workshop. Based on the workshop results, the recommended site or sites that best meet the criteria and objectives of the City will be determined and presented to the City of Lincoln.

It is anticipated that three public meetings will be conducted by LWWS and Black & Veatch during the Wastewater Treatment Facility Siting Study to present information and obtain feedback from the community. Site selection criteria will be presented for feedback during the first public meeting. The second public meeting is intended to solicit feedback on proposed regional circle areas for wastewater treatment facilities in southwest Lincoln. The final selected regional circle area for a wastewater treatment facility will be presented in the third public meeting and community feedback will be incorporated into final evaluation and report preparation.